

# BAY AREA TOLL AUTHORITY

## Regional Measure 1 Toll Bridge Projects

# Project Monitoring Program

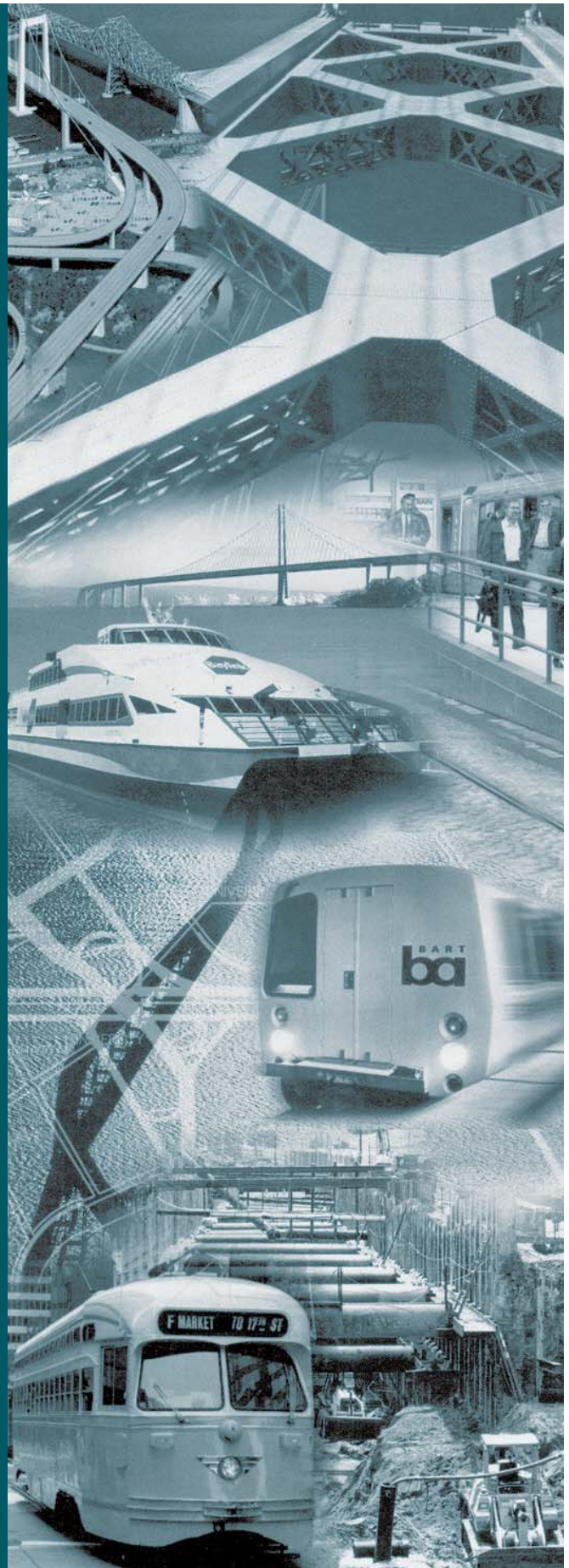
OCTOBER 2003 PROGRESS REPORT



**Metropolitan Transportation  
Commission**

**Bay Area Toll Authority**

Released November 2003



# **Bay Area Toll Authority/Metropolitan Transportation Commission**

## *Commission Roster*

**Steve Kinsey**, MTC Chair  
Marin County and Cities

**Jon Rubin**, MTC Vice Chair  
San Francisco Mayor's Appointee

**Tom Ammiano**  
City and County of San Francisco

**Irma L. Anderson**  
Cities of Contra Costa County

**Tom Azumbrado**  
U.S. Department of Housing and  
Urban Development

**James T. Beall Jr.**  
Santa Clara County

**Mark DeSaulnier**  
Contra Costa County

**Bill Dodd**  
Napa County and Cities

**Dorene M. Giacomini**  
U.S. Department of Transportation

**Scott Haggerty**  
Alameda County

**Barbara Kaufman**  
San Francisco Bay Conservation  
and Development Commission

**Sue Lempert**  
Cities of San Mateo County

**John McLemore**  
Cities of Santa Clara County

**Michael Nevin**  
San Mateo County

**Bijan Sartipi**  
State Business, Transportation  
and Housing Agency

**James P. Spering**  
Solano County and Cities

**Pamela Torliatt**  
Association of Bay Area Governments

**Sharon Wright**  
Sonoma County and Cities

**Shelia Young**  
Cities of Alameda County

## *Management Staff*

*Executive Director*  
**Steve Heminger**

*Deputy Director, Operations*  
**Ann Flemer**

*Deputy Director, Policy*  
**Therese McMillan**

*General Counsel*  
**Francis Chin**

*Manager of Finance*  
**Brian Mayhew**

*Manager of Bridge  
and Highway Operations*  
**Rod McMillan**

## **For additional information, please contact:**

**Peter Lee**, Program Manager, RM-1  
(510) 817-3206  
[plee@mtc.ca.gov](mailto:plee@mtc.ca.gov)

# BAY AREA TOLL AUTHORITY

## **Regional Measure 1 Toll Bridge Projects**

# **Project Monitoring Program**

## **OCTOBER 2003 PROGRESS REPORT**



*Prepared for*  
**Metropolitan Transportation  
Commission**

**Bay Area Toll Authority**

**Joseph P. Bort MetroCenter**  
101 Eighth Street  
Oakland, California 94607  
Tel: 510-464-7700  
TDD/TTY: 510-464-7769  
Fax: 510-464-7848  
E-mail: [info@mtc.ca.gov](mailto:info@mtc.ca.gov)  
Web: [www.mtc.ca.gov](http://www.mtc.ca.gov)



*Prepared by*  
**Bechtel Infrastructure Corporation**



*The following information is provided in accordance with California Government code Section 7550:*

*This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Regional Measure 1 Toll Bridge Program. The contract value for the monitoring efforts, technical analysis, and field site work which contribute to these reports, as well as the report preparation and production, is \$3,068,993.00.*

## TABLE OF CONTENTS

Regional Measure 1 Toll Bridge Program .....	1
Executive Summary - Status of Regional Measure 1 Projects, and Key Issues and Developments	
Northern Bridge Group .....	2
Southern Bridge Group .....	4
Cost Status Summary .....	6
Schedule Status Summary .....	7
Northern Bridge Group	
New Benicia-Martinez Bridge .....	8
Carquinez Bridge Replacement .....	10
Richmond-San Rafael Bridge Rehabilitation .....	12
Southern Bridge Group	
San Mateo-Hayward Bridge Widening .....	14
I-880/SR-92 Interchange Improvement .....	16
Dumbarton Bridge West Approach Projects .....	18
Appendices	
Appendix A: Project Budget Adjustments .....	A-1
Appendix B: Current Approved Contract Change Orders (CCOs) .....	B-1
Appendix C: Project Cost Summary Details .....	C-1



REGIONAL MEASURE 1 TOLL BRIDGE PROJECTS



## BAY AREA TOLL AUTHORITY

### REGIONAL MEASURE 1 TOLL BRIDGE PROGRAM

In November 1988, Bay Area voters approved Regional Measure 1 (RM 1) and authorized a standard auto toll of \$1 for all seven state-owned Bay Area toll bridges. The additional revenues generated by the toll increase were identified for use for certain highway and bridge improvements, public transit rail extensions, and other projects that reduce congestion on the bridges.

RM 1 identified nine specific bridge and highway improvement projects as eligible for funding from the toll increase. The projects identified by RM 1 and their status of development are depicted in the map on the facing page and can be itemized as follows:

#### *Northern Bridge Group Projects:*

1. Widening of the existing Benicia-Martinez Bridge (completed; not included in this report)
2. Construction of a new bridge parallel to the existing Benicia-Martinez Bridge
3. Replacement of the existing western span of the Carquinez Bridge
4. Major rehabilitation of the existing Richmond-San Rafael Bridge
  - Trestle and fender rehabilitation
  - Deck rehabilitation
5. Construction of an eastern approach (Richmond Parkway) between the Richmond-San Rafael Bridge and Interstate 80 near Pinole (non-Caltrans project; completed)

#### *Southern Bridge Group Projects:*

1. Construction of the West Grand Avenue connector to the San Francisco-Oakland Bay Bridge (completed; not included in this report)
2. Widening of the existing San Mateo-Hayward Bridge and eastern approach to six lanes (completed)
3. Improvement of the Interstate 880/State Route 92 interchange
4. Improvements to the western approaches to the Dumbarton Bridge
  - US 101/University Avenue interchange reconstruction (non-Caltrans project; completed)
  - State Route 84 (Bayfront Expressway) widening (completed).

### MTC, BATA, AND THE CALIFORNIA STATE DEPARTMENT OF TRANSPORTATION (CALTRANS)

As the regional transportation planning agency for the San Francisco Bay Area, MTC is responsible for transportation planning, coordinating, and fund programming in the nine counties surrounding the Bay.

With SB 226, MTC, as the Bay Area Toll Authority (BATA), has also assumed certain duties previously held by the California Transportation Commission, including responsibilities for the programming, administration, and allocation of all toll revenues (excluding the seismic surcharge) from the state-owned toll bridges in the Bay Area.







Caltrans continues to be responsible for the ongoing operation of the state-owned bridges, including the collection of tolls, as well as the maintenance, rehabilitation, and capital improvement of the bridges.

### PROJECT MONITORING PROGRAM




This report focuses on monitoring project cost and schedule performance for the Regional Measure 1 Toll Bridge Improvement Projects, as measured against approved budget and schedule milestones. The report provides comprehensive project status information at three levels of detail:

- Color-coded executive summary of Regional Measure 1 projects status (program level)
- Detailed status of individual bridge projects (project level)
- Supplemental project and contract information, including budget adjustments, approved construction change orders, and project and contract level cost data, in the appendices.

EXECUTIVE SUMMARY - STATUS OF REGIONAL MEASURE 1 PROJECTS

NORTHERN BRIDGE GROUP	COST	SCHEDULE
New Benicia-Martinez Bridge		
Carquinez Bridge Replacement		
Richmond-San Rafael Bridge Rehabilitation		

**Legend:**

-  Green = no variance to current budget/schedule
-  Yellow = variance to current budget/schedule (trend), defined as follows:  
For Cost: Project (BATA) contingency use may be required  
For Schedule: Construction contract completion dates delayed by greater than 3 months
-  Red = variance to current budget/schedule, defined as follows:  
For Cost: Project budget change may be required  
For Schedule: "New facility open to traffic" date delayed by greater than 3 months by non-weather-related issues












## BAY AREA TOLL AUTHORITY

### EXECUTIVE SUMMARY – STATUS OF KEY ISSUES AND DEVELOPMENTS

- On the new bridge contract, pile driving is complete, with the exception of several piles at Piers 6 and 7 that are not completely driven to their tip elevations. Forecast completion for these piles is November 2003. Rock sockets are being installed at Piers 8 and 16. A tower crane has been erected at Pier 9 for construction of the pier and rebar is being installed for the pier column. The precast footing for Pier 13 is being constructed at Mare Island. The isolation casing at the Pier 5 column is complete and is being backfilled.
  - Additional costs and delay are still expected on this contract in regards to installation of rock sockets, modifications to the superstructure design, and additional support costs. Caltrans is working with the design engineers and the contractor to resolve the design/construction issues. Caltrans will report to BATA as the issues are clarified.
  - On the I-680/I-780 interchange contract, foundation and concrete operations continue. On the I-780 to I-680 connector overpass, superstructure falsework and formwork are in place over existing traffic on I-680 and I-780 from Abutment 9 to Bent 5. Falsework erection continues westward toward Bent 3. Rock socket installation continues at Bent 18 on the Benicia shoreline for the transition structure from the new bridge. Demolition, excavation and paving are in progress in the median on northbound I-680. Mass earthwork operations are in progress on southbound I-680 to westbound I-780.
  - On the toll plaza contract, concrete encasement of the mechanical duct continues. On the Operations Building, installation of utilities, exterior windows and tile continues on the lower and main levels. Miscellaneous concrete operations are in progress in the courtyard.
  - On the I-680/Marina Vista interchange contract, foundation and concrete operations continue on the Mococo overcrossing. Pile installation continues at Bent 4. Rebar installation continues at Abutments 1 and 9. Superstructure formwork installation and concrete placing are in progress from Abutment 9 to Bent 7. At the northbound Marina Vista off-ramp, lightweight concrete fill is complete and asphalt paving is nearing completion.
- 
- On the replacement bridge contract, man lifts and tower cranes have been removed from both bridge towers. Painting continues on the cables and the deck. Asphalt paving on the bridge deck was completed on October 8, 2003. Bridge railing and lights are being installed. At the North Anchorage, final grading and paving continues for the bike path and the North Vista Point. On the south end, the overhead sign for the Crockett exit was placed on October 14, 2003.
  - The cost status code for the project is "yellow" due to construction claims and increasing support costs. Caltrans and Bechtel are reviewing these costs to determine funding impacts.
  - The new bridge will open to traffic on November 11, 2003.
  - On the south approach and interchange contract, concrete is complete for the Crockett viaduct superstructure and falsework is being removed. Deck closure pours and installation of joint seal assemblies and barrier rail continue. Superstructure formwork and deck concrete operations continue for the I-80 on/off-ramps. Traffic lights have been installed and final paving is complete at the Pomona intersection. On westbound I-80, paving in the median and concrete operations on Retaining Wall D3 are complete.
- 
- On the trestle replacement, demolition and pile installation continue eastward along the interior and exterior of the existing eastbound and westbound trestles. Interior pile cleanout and concrete placement is in progress at Bents 17 through 19. Exterior pile installation has progressed to Bent 9 of 37. Pile caps are in place at Bents 1 through 6. The first precast deck section was installed on October 4, 2003 between Bents 1 and 2 on the westbound trestle. The second section was installed on October 24, 2003.
  - The cost and schedule status codes for the project are "yellow" while Caltrans reevaluates the scope and schedule of the deck rehabilitation work. Rehabilitation of the deck cannot begin until the seismic work on the bridge is completed, currently forecast for 2005.

EXECUTIVE SUMMARY - STATUS OF REGIONAL MEASURE 1 PROJECTS

SOUTHERN BRIDGE GROUP	COST	SCHEDULE
San Mateo-Hayward Bridge Widening		
I-880/SR-92 Interchange Improvement		
Dumbarton Bridge West Approach Projects (Bayfront Expressway)		

- Legend:**
-  Green = no variance to current budget/schedule
  -  Yellow = variance to current budget/schedule (trend), defined as follows:  
For Cost: Project (BATA) contingency use may be required  
For Schedule: Construction contract completion dates delayed by greater than 3 months
  -  Red = variance to current budget/schedule, defined as follows:  
For Cost: Project budget change may be required  
For Schedule: "New facility open to traffic" date delayed by greater than 3 months by non-weather-related issues

## BAY AREA TOLL AUTHORITY

### EXECUTIVE SUMMARY – STATUS OF KEY ISSUES AND DEVELOPMENTS

- On the bridge-widening contract, both the new westbound and the reconstructed eastbound trestles are complete and fully operational. Caltrans has accepted the contract and is in the process of resolving claims and closing the contract. Although final settlement of outstanding claims may require utilization of project contingency, a project budget change is not anticipated.
  
- Caltrans submitted the Final Environmental Impact Statement Report (FEIS/R) for the project to the Federal Highway Administration (FHWA) for approval on August 8, 2003. Approval of the Document is forecast for November 2003. A Record of Decision from FHWA is expected in January 2004.
- Caltrans is currently preparing the plans, specifications, and estimates for the project. Sixty-five percent PS&E is forecast for completion in February 2004.
- Based on the delayed project delivery and the associated escalation cost, the status code for the project cost is "yellow." As the design progresses, Bechtel will further review the cost estimates.
  
- On the Bayfront Expressway widening contract, the widened expressway officially opened to traffic on July 29, 2003. New traffic lights are operational except for right turn lanes at Willow and University. Miscellaneous electrical, punchlist items and project closeout continue. Construction completion is scheduled for December 2003.
- A follow-on contract has been awarded for environmental mitigation at the Ravenswood Triangle area. The work involves wetland reconstruction and habitat restoration for the salt-water harvest mouse.

## COST STATUS SUMMARY (MILLION DOLLARS)

PROJECT	Baseline Budget (June 2000)	Current Budget (Oct 2003)	Current Forecast (Oct 2003)	Expended To Date (7/98 - 9/03)
<b>Northern Bridge Group</b>				
New Benicia-Martinez Bridge	586.0	652.8	904.8 <sup>2</sup>	331.3
Carquinez Bridge Replacement	433.2	479.8	499.8	392.8
Richmond-San Rafael Bridge Rehabilitation				
➤ West Trestle and Fender Rehabilitation	45.4	35.4	35.4	21.6
➤ Deck Rehabilitation	53.4	53.4	53.4	0.3
Richmond Parkway ( <i>Non-Caltrans</i> ) <sup>1</sup>	5.9	5.9	5.9	2.4
<b>SUBTOTAL - NBG</b>	<b>1,123.9</b>	<b>1,227.2</b>	<b>1,499.2</b>	<b>748.4</b>
<b>Southern Bridge Group</b>				
San Mateo-Hayward Bridge Widening				
➤ Widening	203.6	217.5	217.5	194.3
➤ West Approach Replacement Planting	0.4	0.4	0.4	0.0
I-880/SR-92 Interchange Improvement	124.2	133.8	149.3	14.9
Dumbarton Bridge West Approach Projects				
➤ US-101/University Avenue Interchange Reconstruction ( <i>Non-Caltrans</i> )	3.8	3.8	3.8	3.7
➤ Bayfront Expressway (SR-84) Widening	33.8	36.0	36.0	31.3
<b>SUBTOTAL - SBG</b>	<b>365.7</b>	<b>391.4</b>	<b>406.9</b>	<b>244.3</b>
<b>GRAND TOTAL</b>	<b>1,489.6</b>	<b>1,618.6</b>	<b>1,906.1</b>	<b>992.7</b>

<sup>1</sup> For the Richmond Parkway, values shown represent the portion funded by BATA.

<sup>2</sup> Due to project delays and other difficulties associated with deep water pile driving operations, project costs for the New Benicia-Martinez Bridge are expected to significantly exceed the budget. An update of the projected cost increase will be included in a future PMP report.

BAY AREA TOLL AUTHORITY

SCHEDULE STATUS SUMMARY

PROJECT	New Facility Open to Traffic Baseline (June 2000)	New Facility Open to Traffic Current (Sep 2003)	New Facility Open to Traffic Forecast (Oct 2003)
<b>Northern Bridge Group</b>			
New Benicia-Martinez Bridge	Jan 04	Dec 04	Dec 05 <sup>2</sup>
Carquinez Bridge Replacement	Jan 03	Oct 03	Nov 03
Richmond-San Rafael Bridge Rehabilitation			
➤ West Trestle and Fender Rehabilitation <sup>1</sup>	Dec 04	Feb 05	Feb 05
➤ Deck Rehabilitation <sup>1</sup>	Sep 06	Jul 07	Jul 07
Richmond Parkway ( <i>Non-Caltrans</i> )	Feb 01	May 01	May 01
<b>Southern Bridge Group</b>			
San Mateo-Hayward Bridge Widening			
➤ Widening	Dec 02	Nov 02	Nov 02
➤ West Approach Replacement Planting <sup>1</sup>	May 08	May 08	May 08
I-880/SR-92 Interchange Improvement	Dec 06	Jun 09	Jun 09
Dumbarton Bridge West Approach Projects			
➤ US-101/University Avenue Interchange Reconstruction ( <i>Non-Caltrans</i> ) <sup>1</sup>	Apr 00	Apr 00	Apr 00
➤ Bayfront Expressway (SR-84) Widening <sup>1</sup>	Mar 03	Oct 03	Jul 03

<sup>1</sup> For the Richmond-San Rafael Bridge Rehab, San Mateo-Hayward Bridge West Approach Planting, and Dumbarton Bridge West Approach projects, the dates shown reflect construction completion; the existing facility remains open to traffic during all phases of construction.

<sup>2</sup> Completion of the Benicia-Martinez Bridge is expected to be delayed at least 12 to 24 months beyond the current schedule date of December 2004.

## NEW BENICIA-MARTINEZ BRIDGE

The existing Benicia-Martinez Bridge provides Interstate 680 access across the Carquinez Strait between Contra Costa and Solano counties. This project will construct a new parallel Benicia-Martinez Bridge east of the existing span that will include the following features:

- Five northbound lanes on the new bridge (four mixed-flow lanes and one slow-vehicle lane) that will allow conversion of the existing bridge to southbound traffic only
- A new bicycle/pedestrian lane on the existing bridge
- A new toll plaza south of the new bridge in Contra Costa County with 17 toll booths, including two high-occupancy-vehicle (HOV) bypass lanes
- Reconstruction of the Interstate 680/Marina Vista Road and Interstate 680/Interstate 780 interchanges

### Project Photos



Toll Plaza



Pier 9



I-780/I-680 Connector Overpass looking east

### Current Activities:

- On the new bridge contract, soffit and stem superstructure concrete is in place from the south abutment to Pier 4, and the first deck span, from the south abutment to Pier 2, has been poured. The last pile was driven at Pier 15 on October 16, 2003. Several piles with damaged casing tips at Piers 6 and 7 will be driven to final tip elevation after the casings are repaired. Piles at Pier 6 are forecast to be completed in late November. A deep-water rotator is working at Pier 8 on three of nine rock sockets. On the north trestle, a second rotator has completed four of eight rock sockets at Pier 16. The rock socket platform at Pier 17 is complete. Concrete operations are in progress for the column at Pier 9. Precast footing construction continues at Mare Island for Pier 13.
- On the I-680/I-780 interchange contract, formwork construction continues for the I-780 to I-680 superstructure over existing traffic from Abutment 9 to Bent 5 and falsework erection continues from Bent 5 to Bent 3. On northbound I-680, barrier rail demolition, drainage and paving are in progress in the median. On eastbound I-780, drainage, paving and sign installation is complete. On southbound I-680 to westbound I-780, Drainage System 6 is installed and cut and fill earthwork is in progress. On the Benicia shoreline, CISS pile installation continues at Bent 18.
- On the toll plaza contract, the mechanical duct is installed and concrete encasement is in progress. On the Operations Building, installation of aluminum composite panels continues on the building perimeters. Utilities installation, tile work and painting continue on the lower and main floors. Elevator assembly and installation continue in the east and west elevator hoistways. Sewer line connections are being installed on the east side. Concrete operations are in progress for the upper courtyard.
- On the I-680/Marina Vista interchange contract, rebar installation continues at Abutments 1 and 9 for the Mococo Overcrossing. Drilling and installation of piles at Bent 4 is delayed due to a lack of bearing capacity on one pile. Falsework and formwork erection is in progress for the superstructure between Bent 6 and Abutment 9. Soffit and stem concrete is complete on the left and middle bridges. Deck form construction and deck rebar installation continue. Deck pours are scheduled for early November. On the northbound Marina Vista off-ramp, installation of lightweight concrete fill is complete and asphalt paving is in progress. Work continues on various retaining walls.



BAY AREA TOLL AUTHORITY

NEW BENICIA-MARTINEZ BRIDGE

COST STATUS (\$ Million)	Baseline Budget (June 2000)	Current Budget (Oct 2003)	Current Forecast (Oct 2003)	Variance	Expended to Date (7/98 - 9/03)	Notes
Capital Outlay Construction						
South Approach	6.0	7.0	7.0	0.0	6.7	
New Bridge	247.3	307.5	307.5	0.0	158.2	A
Toll Plaza and Administration Building	22.8	21.4	21.4	0.0	10.3	
I-680/Marina Vista Interchange	43.2	45.1	45.1	0.0	19.3	
I-680/I-780 Interchange	80.8	54.7	54.7	0.0	36.0	
Other Budgeted Capital	28.1	30.0	30.0	0.0	1.7	
Capital Outlay Support	78.2	105.0	105.0	0.0	82.0	A
Capital ROW	21.1	20.9	20.9	0.0	11.4	
Non-BATA Funding	0.0	31.0	31.0	0.0	5.8	
Project (BATA) Contingency	58.4	30.1	282.1	252.0		A
<b>Project Total (a)</b>	<b>586.0</b>	<b>652.8</b>	<b>904.8</b>	<b>252.0</b>	<b>331.3</b>	<b>A</b>
(a) Totals may be rounded						

SCHEDULE STATUS	Baseline (June 2000)	Current (Sep 2003)	Forecast (Oct 2003)	Variance	Notes
<b>Construction Contract Completion</b>					
New Bridge	Jan 04	Dec 04	Dec 05	+12	A
Toll Plaza and Administration Building	Feb 03	May 04	Jun 04	+1	
I-680/Marina Vista Interchange	Dec 03	Dec 04	Jan 05	+1	
I-680/I-780 Interchange	Dec 03	Jan 05	Mar 05	+2	
I-680/I-780 I/C Electrical Completion		Jan 05	Jun 05	+5	B
South Approach	Mar 01	Oct 01	Oct 01	0	Complete
Modify Existing Bridge	Jul 05	Dec 06	Dec 06	0	
<b>Project</b>					
<b>New Facility Open to Traffic</b>	<b>Jan 04</b>	<b>Dec 04</b>	<b>Dec 05</b>	<b>+12</b>	<b>A</b>

NOTES	ACTION
<p><b>A.</b> In addition to the significant cost and schedule impacts associated with the pile driving/ fish takes mitigation strategy, other significant cost increases have been identified. These cost increases are associated with difficulty in driving the foundation piles to required tip elevation, installation of the foundation rock sockets below the pile tips, adjustments to the design of the superstructure, and additional support services. The total additional costs may exceed \$250 million. An estimate of the revised project cost will be included in a future PMP report. Construction completion of the new bridge is expected to be delayed at least 12 to 24 months beyond the current scheduled contract completion of December 2004.</p> <p><b>B.</b> Electrical work on the I-680/I-780 contract cannot be completed prior to completion of the New Bridge.</p>	<p>Caltrans is evaluating the costs and schedule impacts. Bechtel will evaluate these impacts as they are developed by Caltrans. BATA is evaluating strategies to fund the cost overrun.</p> <p>Electrical work will be completed in conjunction with the New Bridge.</p>

## CARQUINEZ BRIDGE REPLACEMENT

The existing Carquinez Bridge carries Interstate 80 traffic between the cities of Vallejo and Crockett on two separate bridges: the 1927 bridge for westbound traffic and the 1958 bridge for eastbound traffic. While the 1958 bridge is being strengthened under Caltrans' seismic retrofit program, the 1927 bridge has been identified as being seismically deficient and will be replaced under the RM 1 program. The Carquinez Bridge replacement project will construct a new suspension bridge west of the existing bridges. The existing 1927 bridge will be demolished after the completion of this project. The project will incorporate the following features:

- Four westbound lanes on the new bridge (three mixed-flow lanes and one HOV lane)
- A new bicycle/pedestrian lane on the new bridge



*Replacement Bridge – Opening Celebration*

### Project Photos



*Opening Celebration – Nov. 8, 2003*



*Opening Celebration – Nov. 8, 2003*

### Current Activities:

- On the replacement bridge and north approach contract, construction man lifts and tower cranes have been removed from both towers and touch up of the concrete is in progress. Asphalt paving on the bridge deck was completed on October 8, 2003. Painting continues underneath the bridge deck. Installation of light standards and guardrails is in progress. The overhead exit sign for Crockett has been installed at Pier 1. Suspender cover plates have been installed on both the north and south sides of the bridge. Civil work continues at the North Vista Point. Installation of electrical and barrier rail along the northern bike path are in progress.
- The new bridge will open to traffic on November 11, 2003.
- On the south approach and interchange contract, deck concrete on the Crockett Viaduct and westbound on-ramp is complete. Closure pours and installation of shear keys, joint seal assemblies and barrier rails are in progress. On the westbound and eastbound off-ramps, concrete operations continue with soffit, stem and deck pours. Traffic lights have been installed at the Pomona intersection. Paving is complete at the intersection and striping will occur in early November 2003. On westbound I-80, median work is complete, and Retaining Wall D3 was completed.

BAY AREA TOLL AUTHORITY

CARQUINEZ BRIDGE REPLACEMENT

COST STATUS (\$ Million)	Baseline Budget (June 2000)	Current Budget (Oct 2003)	Current Forecast (Oct 2003)	Variance	Expended to Date (7/98 – 9/03)	Notes
Capital Outlay Construction						
Replacement Bridge and North Approach	213.7	239.2	239.2	0.0	217.4	A
South Approach and Interchange	116.0	73.9	73.9	0.0	56.2	
Maintenance Facility (Phases I & II)	7.0	8.1	8.1	0.0	7.8	
1927 Bridge Demolition	16.0	16.0	16.0	0.0	0.0	
Other Budgeted Capital	10.6	11.5	11.5	0.0	6.3	
Capital Outlay Support	43.7	108.4	108.4	0.0	95.8	A
Capital ROW	9.6	11.1	11.1	0.0	9.3	
Project (BATA) Contingency	16.5	11.6	31.6	20.0		A
<b>Project Total (a)</b>	<b>433.2</b>	<b>479.8</b>	<b>499.8</b>	<b>20.0</b>	<b>392.8</b>	<b>A</b>

(a) Totals may be rounded

SCHEDULE STATUS	Baseline (June 2000)	Current (Sep 2003)	Forecast (Oct 2003)	Variance	Notes
<b>Construction Contract Completion</b>					
Replacement Bridge & North Approach	Dec 03	May 04	May 04	0	
South Approach and Interchange (Phase 1)	Feb 03	Aug 03	Nov 03	+3	
South Approach and Interchange (Phase 2)		Oct 04	Feb 04	-8	
Maintenance Facility	Mar 02	Sep 02	Sep 02	0	Complete
1927 Bridge Demolition	Mar 06	Mar 06	Mar 06	0	
<b>Project</b>					
<b>New Facility Open to Traffic</b>	<b>Jan 03</b>	<b>Oct 03</b>	<b>Nov 03</b>	<b>+1</b>	

NOTES	ACTION
A. Based on current information, Bechtel estimates that potential claims and additional support services costs may increase the total project cost by an additional \$20 million for a total project cost of \$500 million. Bechtel will assist in the review of potential claims and support cost increases on the project. The results of this review will be included in a future PMP report.	Caltrans is seeking additional information in order to properly evaluate these potential cost increases.

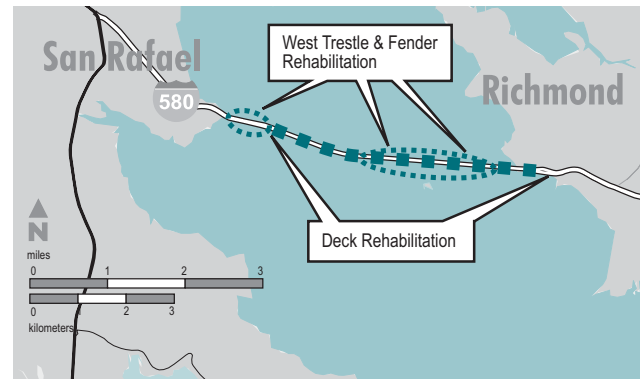
## RICHMOND-SAN RAFAEL BRIDGE REHABILITATION

Completed in 1956, the Richmond-San Rafael Bridge provides access - via Interstate 580 - across San Francisco Bay between Marin and Contra Costa counties. Major rehabilitation of the bridge was specified in RM 1 to be eligible for toll funding.

Currently, there are two major rehabilitation projects planned for the bridge:

- The first project is to replace the western trestle (low-rise) section of the bridge near San Rafael and rehabilitate the ship collision protection fender system at various bridge piers. This rehabilitation work is being combined with a seismic retrofit project.
- The second project is to rehabilitate the existing concrete deck on the bridge. The cast-in-place concrete riding surface (deck) has been worn over

time due to traffic and exposure to the marine environment. This project will follow the completion of the trestle and fender rehabilitation project to avoid possible construction conflicts.



### Project Photos



Installing Second Deck Section



Installing Second Deck Section

### Current Activities:

- The west trestle replacement consists of rebuilding the eastbound and westbound trestles near San Quentin. The trestles are parallel for most of their length and diverge to carry traffic onto or from the upper or lower deck of the main bridge. The westbound trestle, serving the upper deck, is 2,844 feet (867 meters) between Bents 1 and 29; the eastbound trestle, serving the lower deck, is 3,635 feet (1,108 meters) between Bents 1 and 37. The trestle replacement procedure consists of reducing lane width, demolishing an 8 feet (2 meters) linear section of interior bridge deck, installing a temporary interior work trestle, and installing interior sixty-six inch (1,680 mm) cast-in-drilled-hole (CIDH) piles at the mid-span of every other existing 50-foot (15 meter) deck section. When installation of the interior piles is well advanced, a similar operation is repeated on the exterior, where a section of exterior bridge deck is removed and exterior piles are installed. After installation of the piles, pile caps are cast in place below the existing superstructure, atop the opposing new interior and exterior piles. Following pile cap construction, one trestle at a time is closed at night for superstructure replacement. Each night, two of the existing 50-foot (15 meter) sections are removed and replaced with one 100-foot (30 meter) precast section.
- Construction continues from west to east on the interior and exterior sections of the existing eastbound and westbound trestles. Interior pile installation is currently at Bent 25 of 37 with cleanout and concrete infill of the pile casings at Bents 17 through 19 of 37. Exterior pile installation has progressed to Bent 9. Pile caps have been installed from Bent 1 through Bent 6. The first pre-cast deck replacement section was installed on October 4, 2003 between Bents 1 and 2 on the westbound trestle. The second section was installed on October 24, 2003.



BAY AREA TOLL AUTHORITY

RICHMOND-SAN RAFAEL BRIDGE REHABILITATION

COST STATUS (\$ Million)	Baseline Budget (June 2000)	Current Budget (Oct 2003)	Current Forecast (Oct 2003)	Variance	Expended to Date (7/98 - 9/03)	Notes
<b>West Trestle and Fender Rehabilitation</b>						
Capital Outlay Construction	33.9	0.0	0.0	0.0	0.0	
Capital Outlay Support	5.4	0.7	0.7	0.0	0.7	
Capital ROW	0.0	0.0	0.0	0.0	0.0	
Non-BATA Funding	0.0	34.6	34.6	0.0	20.8	
Project (BATA) Contingency	6.1	0.0	0.0	0.0		
<b>Subtotal</b>	<b>45.4</b>	<b>35.4</b>	<b>35.4</b>	<b>0.0</b>	<b>21.6</b>	
<b>Deck Rehabilitation</b>						
Capital Outlay Construction	33.0	33.0	33.0	0.0	0.0	
Capital Outlay Support	9.0	5.0	5.0	0.0	0.3	
Capital ROW	0.0	0.0	0.0	0.0	0.0	
Non-BATA Funding	0.0	4.0	4.0	0.0	0.0	
Project (BATA) Contingency	11.4	11.4	11.4	0.0		
<b>Subtotal</b>	<b>53.4</b>	<b>53.4</b>	<b>53.4</b>	<b>0.0</b>	<b>0.3</b>	
<b>Project Total (a)</b>	<b>98.8</b>	<b>88.8</b>	<b>88.8</b>	<b>0.0</b>	<b>21.9</b>	
(a) Totals may be rounded						

SCHEDULE STATUS	Baseline (June 2000)	Current (Sep 2003)	Forecast (Oct 2003)	Variance	Notes
<b>Construction Contract Completion</b>					
West Trestle and Fender Rehabilitation	Dec 04	Feb 05	Feb 05	0	A
Deck Rehabilitation	Sep 06	Jul 07	Jul 07	0	A
<b>Project</b>					
<b>New Facility Open to Traffic</b>					B

NOTES	ACTION
A. The deck rehabilitation will follow the completion of the retrofit project.	Caltrans is reviewing the forecast completion date of the deck rehabilitation contract.
B. The existing facility remains open to traffic during all phases of construction.	None.

### SAN MATEO-HAYWARD BRIDGE WIDENING

In 1996, the western approach to the San Mateo-Hayward Bridge from U.S. Route 101 was widened from four to six lanes to match the configuration of the high-rise section of the bridge. The current project completed the widening work in this corridor along the low-trestle section of the bridge and its eastern approach to Interstate 880. The project includes the following features:

- Widening of the low-rise trestle and eastern approach from I-880 from four to six lanes with shoulders
- Extension of the existing west-bound HOV lane one mile west along the eastern approach from Interstate 880
- Construction of a new pedestrian/bicycle overcrossing of State Route 92
- Expansion of the existing toll plaza
- Improvements to the Hayward Shoreline Interpretive Center



*Mini Toll Plaza*

### Project Construction Progress and Photos



*Trestle looking west*



*Pedestrian Overcrossing*

### Current Activities:

- On the bridge-widening contract, construction is complete and both trestles are open to traffic. Caltrans accepted the contract on March 6, 2003 and is in the process of closing the contract and resolving claims on the project. Final settlement of outstanding claims may require utilization of project contingency.



BAY AREA TOLL AUTHORITY

SAN MATEO-HAYWARD BRIDGE WIDENING

COST STATUS (\$ Million)	Baseline Budget (June 2000)	Current Budget (Oct 2003)	Current Forecast (Oct 2003)	Variance	Expended to Date (7/98 - 9/03)	Notes
<b>Widening</b>						
Capital Outlay Construction						
Widen Trestle	124.8	128.9	128.9	0.0	126.4	A
Widen Roadway	29.2	26.1	26.1	0.0	25.5	
Construct Mini Toll Plaza	4.4	6.3	6.3	0.0	6.0	
Other Budgeted Capital	8.9	8.6	8.6	0.0	3.3	
Capital Outlay Support	15.5	40.1	40.1	0.0	32.6	
Capital ROW	1.5	1.5	1.5	0.0	0.5	
Project (BATA) Contingency	19.3	6.0	6.0	0.0		A
<b>Subtotal</b>	<b>203.6</b>	<b>217.5</b>	<b>217.5</b>	<b>0.0</b>	<b>194.3</b>	
<b>West Approach Planting</b>						
Capital Outlay Construction	0.2	0.2	0.2	0.0	0.0	
Capital Outlay Support	0.1	0.1	0.1	0.0	0.0	
Capital ROW	0.0	0.0	0.0	0.0	0.0	
Project (BATA) Contingency	0.1	0.1	0.1	0.0		
<b>Subtotal</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.0</b>	<b>0.0</b>	
<b>Project Total (a)</b>	<b>204.0</b>	<b>217.9</b>	<b>217.9</b>	<b>0.0</b>	<b>194.3</b>	
(a) Totals may be rounded						

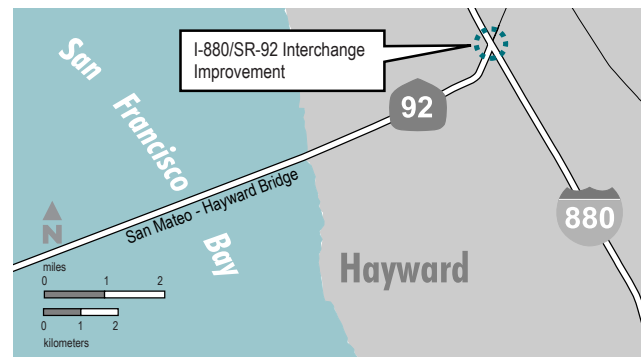
SCHEDULE STATUS	Baseline (June 2000)	Current (Sep 2003)	Forecast (Oct 2003)	Variance	Notes
<b>Construction Contract Completion</b>					
<b>Widening</b>					
Widen Trestle	Dec 02	Feb 03	Feb 03	0	Complete
Construct Mini Toll Plaza	Nov 02	Nov 02	Nov 02	0	Complete
Widen Eastern Approach	Nov 02	Sep 01	Sep 01	0	Complete
Pedestrian Overcrossing	Sep 02	Sep 02	Sep 02	0	Complete
<b>West Approach Planting</b>					
West Approach Replacement Planting	May 08	May 08	May 08	0	
<b>Project</b>					
New Facility Open to Traffic	Dec 02	Nov 02	Nov 02		
<b>NOTES</b>			<b>ACTION</b>		

A. Final settlement of outstanding claims may require utilization of the project contingency.

Caltrans is currently working with the contractor to resolve outstanding claims

## I-880/SR-92 INTERCHANGE IMPROVEMENT

As part of an effort to improve traffic flow and to relieve congestion on the San Mateo-Hayward Bridge and its approaches, RM 1 identified the need to improve and reconstruct the Interstate 880/State Route 92 interchange. While still in the environmental clearance phase, the project proposes to modify the existing cloverleaf interchange to increase capacity and improve safety and traffic operations. Various alternatives are under consideration and are being assessed as part of the environmental process.



### Project Photos



Existing Interchange; looking west



Alternative H Interchange; looking west

### Current Activities:

- Caltrans submitted the Final Environmental Impact Statement Report (FEIS/R) for the project to the Federal Highway Administration (FHWA) for approval on August 8, 2003. Approval of the Document is forecast for November 2003. A Record of Decision from FHWA is expected in January 2004.
- Caltrans is currently preparing the plans, specifications, and estimates for the project. The forecast for sixty-five percent PS&E is February 2004.
- Based on the delayed project delivery and the associated escalation cost, the status code for the project cost is "yellow." As the design progresses, Bechtel will further review the cost estimates.

BAY AREA TOLL AUTHORITY

I-880/SR 92 INTERCHANGE IMPROVEMENT

COST STATUS (\$ Million)	Baseline Budget (June 2000)	Current Budget (Oct 2003)	Current Forecast (Oct 2003)	Variance	Expended to Date (7/98 - 9/03)	Notes
<b>I-880/SR-92 Interchange Improvement</b>						
Capital Outlay Construction	70.3	85.2	85.2	0.0	0.0	A
Capital Outlay Support	20.8	24.1	24.1	0.0	14.9	
Capital ROW	8.0	9.9	9.9	0.0	0.0	
Non-BATA Funding	0.0	9.6	9.6	0.0		
Project (BATA) Contingency	25.1	5.1	20.6	15.5	0.0	A
<b>Project Total (a)</b>	<b>124.2</b>	<b>133.8</b>	<b>149.3</b>	<b>15.5</b>	<b>14.9</b>	<b>A</b>
(a) Totals may be rounded						

SCHEDULE STATUS	Baseline (June 2000)	Current (Sep 2003)	Forecast (Oct 2003)	Variance	Notes
<b>Construction Contract Completion</b>					
I-880/SR-92 Interchange Improvement	Dec 06	Jun 09	Jun 09	0	
<b>Project</b>					
New Facility Open to Traffic	Dec 06	Jun 09	Jun 09	0	

NOTES	ACTION
A. Due to the delayed delivery of the project, additional funds may be necessary for escalation. Bechtel has forecast a potential project increase of \$15 million, resulting in a total project cost of \$150 million.	BATA will prepare a check estimate when 65% engineering design is achieved.

## DUMBARTON BRIDGE WEST APPROACH PROJECTS

RM 1 identified the need for improvements to the western approaches to the Dumbarton Bridge. Through coordination with the City/County Association of Governments of San Mateo County, two projects were identified for toll bridge funding:

- The first project, sponsored by the City of East Palo Alto, modified the U.S. Route 101/University Avenue interchange. This project was designed to alleviate traffic congestion and improve overall traffic flow to University Avenue and the Dumbarton Bridge.
- The second project, sponsored by Caltrans, widened the Bayfront Expressway (State Route 84) from the Dumbarton Bridge to the U.S. 101/Marsh Road interchange. The six-lane expressway section from the bridge to University Avenue is reconstructed with upgraded shoulders and lane widths. The existing expressway section from University Avenue to Marsh Road is widened from four to six lanes.



### Project Photos



Bayfront at Marsh Road



Bayfront at University Ave.

### Current Activities:

- The Bayfront Expressway (SR-84) widening contract was officially opened to traffic on July 29, 2003. All permanent lights at the intersections are operational except for the right turn lanes from 84 to Willow and 84 to University. Electrical and punchlist work and project closeout continue. The contractor's last working day is December 17, 2003.
- A follow-on contract has been awarded at the Ravenswood Triangle for wetland reconstruction and habitat restoration for the water harvest mouse.

BAY AREA TOLL AUTHORITY

DUMBARTON BRIDGE WEST APPROACH PROJECTS

COST STATUS (\$ Million)	Baseline Budget (June 2000)	Current Budget (Oct 2003)	Current Forecast (Oct 2003)	Variance	Expended to Date (7/98 - 9/03)	Notes
<b>US101/University Avenue Interchange Reconstruction (Non-Caltrans)</b>						
Capital Outlay Construction	3.8	3.8	3.8	0.0	3.7	
Capital Outlay Support	0.0	0.0	0.0	0.0	0.0	
Capital ROW	0.0	0.0	0.0	0.0	0.0	
Project (BATA) Contingency	0.0	0.0	0.0	0.0		
<b>Subtotal</b>	<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>0.0</b>	<b>3.7</b>	
<b>Bayfront Expressway (SR84) Widening</b>						
Capital Outlay Construction	24.8	26.6	26.6	0.0	23.9	
Capital Outlay Support	4.4	8.7	8.7	0.0	7.3	
Capital ROW	1.3	0.2	0.2	0.0	0.2	
Project (BATA) Contingency	3.3	0.5	0.5	0.0		
<b>Subtotal</b>	<b>33.8</b>	<b>36.0</b>	<b>36.0</b>	<b>0.0</b>	<b>31.3</b>	
<b>Project Total (a)</b>	<b>37.6</b>	<b>39.8</b>	<b>39.8</b>	<b>0.0</b>	<b>35.0</b>	
(a) Totals may be rounded						

SCHEDULE STATUS	Baseline (June 2000)	Current (Sep 2003)	Forecast (Oct 2003)	Variance	Notes
<b><u>Construction Contract Completion</u></b>					
US 101/University Avenue Interchange Reconstruction (Non-Caltrans)	Apr 00	Apr 00	Apr 00	0	Complete
Bayfront Expressway (SR84) Widening	Mar 03	Oct 03	Dec 03	+2	
<b><u>Project</u></b>					
New Facility Open to Traffic	Mar 03	Oct 03	Jul 03	-3	
NOTES			ACTION		



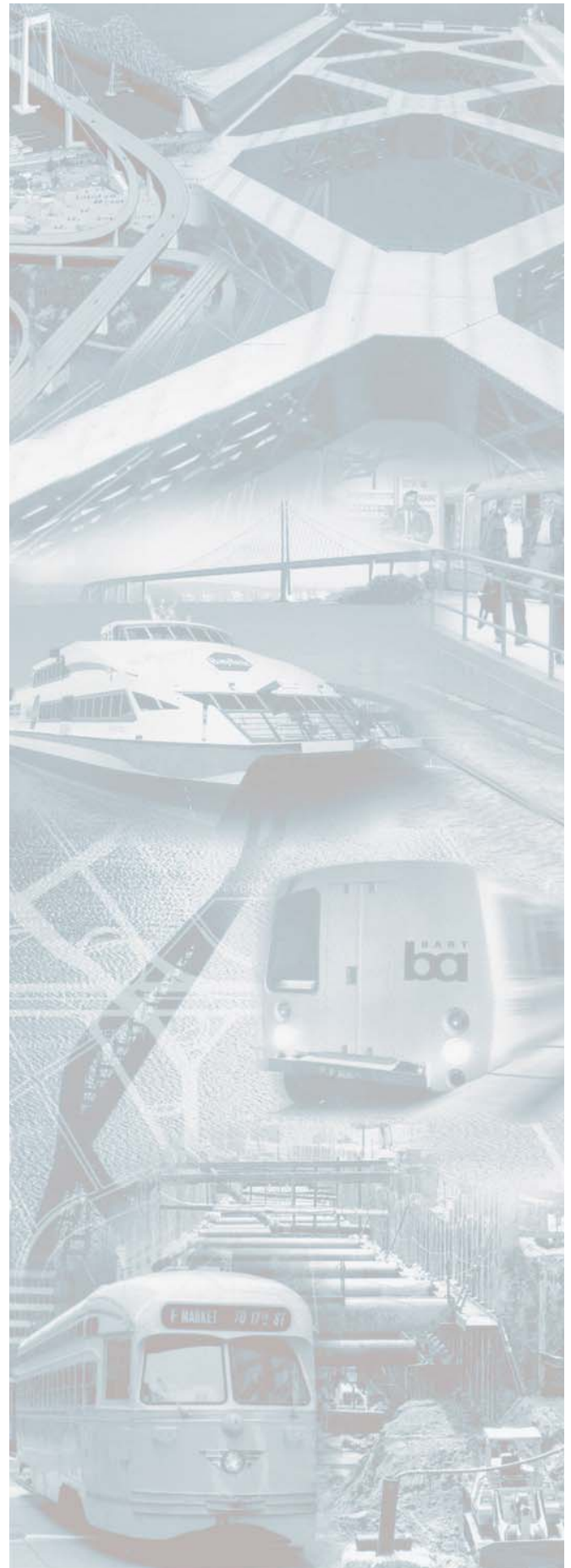


## **APPENDICES**

**Appendix A: Project Budget Adjustments**

**Appendix B: Current Approved Contract Change Orders**

**Appendix C: Project Cost Summary Details**



BAY AREA TOLL AUTHORITY

APPENDIX A – LIST OF PROJECT BUDGET ADJUSTMENTS

DEFINITIONS:

**Baseline Budget (June 2000):** Baseline budgets as established by BATA in June 2000 for each project within the overall program.

**Current Budget:** Budget currently serving as the baseline for monitoring purposes. The current budget is equal to the established June 2000 budget, plus or minus any adjustment as listed below.

Project Baseline Adjustments

Date	Description of Adjustment
10/2000	Current Budgets for allocated capital outlay adjusted by BATA to reflect current Caltrans construction contract allotments.
11/2000	Current Budgets for the Benicia-Martinez and Richmond-San Rafael Bridge projects revised to reflect new funding from Non-BATA sources per agreements with Caltrans and a Prop. 192 refund from Caltrans related to the Carquinez Bridge project.
01/2001	Current Budget for the Benicia-Martinez bridge revised to reflect allocations by BATA.
03/2001	Current Budget for the Carquinez Bridge revised by BATA.
10/2001	Current Budget for the Benicia-Martinez Bridge revised by BATA.
12/2001	Current Budgets for the Benicia-Martinez and San Mateo-Hayward Bridges revised by BATA.
06/2003	Current Budget for the Bayfront Widening project revised by BATA.

BAY AREA TOLL AUTHORITY

**APPENDIX B - APPROVED CONTRACT CHANGE ORDERS (CCO)  
FOR OCTOBER 2003  
BENICIA-MARTINEZ BRIDGE**

Bridge/ Contract	CCO Number <sup>1</sup>	CCO Description	Funding Source <sup>2</sup>	Impacts	
				Cost (\$1000's)	Schedule
<b>New Bridge 04-006034</b>	43.0	Modifications to Rail Insert Spacing	C	195.0	
	54.0	Change Stairs to Pre-fab	C	0.0	
	55.0	New Const. Joints in CIDH Concrete @ P9	C	317.2	
	68.0	Additional Abutment Rebar	C	3.8	
	70.0	Fiberglass Door Change	C	0.0	
	71.0	Span 4 Camber Delays	C	9.5	
	74.0	Value Analysis (Rock Sockets)	C	30.0	
	82.0	Resolution to NOPC #6 - Rejecting Footing Strand	C	4.5	
<b>Subtotal</b>				<b>560.0</b>	
<b>Toll Plaza 04-006044</b>	14.0	NOPC 5 Resolution Revs. to Submittal #39	C	102.9	
	45.0	Reinforcement Mod for Bents 1, 2, and 3	C	70.0	
	52.0	Cover Plates, Stainless Anchors and Screws	C	8.1	
<b>Subtotal</b>				<b>181.0</b>	
<b>Marina Vista Interchange 04-006054</b>	20.0	Double Handling Pile	C	102.8	
	26.0	"WR" Cut-off Wall Revision/Pipe Piling	C	394.0	
	29.0	R.W. Rebar Cage Modifications for Piles	C	21.3	
	30.0	ACME Landfill Disposal Costs	C	88.8	
<b>Subtotal</b>				<b>606.9</b>	
<b>I-680/I-780 Interchange 04-006064</b>	40.0	Bents 1, 19/Approach NWOH	C	19.6	
<b>Subtotal</b>				<b>19.6</b>	
<b>South Approach 04-006094</b>		Contract is complete.			
<b>Totals for Oct 2003</b>				<b>1,367.5</b>	

<sup>1</sup> Only approved CCOs for the month are listed in Appendix B.

<sup>2</sup> Funding Source(s)  
S = Supplemental work  
C = Construction contingency

BAY AREA TOLL AUTHORITY

**APPENDIX B - APPROVED CONTRACT CHANGE ORDERS (CCO)  
FOR OCTOBER 2003  
CARQUINEZ BRIDGE**

Bridge/ Contract	CCO Number <sup>1</sup>	CCO Description	Funding Source <sup>2</sup>	Impacts	
				Cost (\$1000's)	Schedule
<b>Carquinez Bridge Replacement 04-013014</b>	85.0	Paint Pin Plate Drilled Holes (Inside)	C	27.4	
	88.0	Pin Plate Connector Material Change	C	0.0	
	89.0	Eliminate Lower Suspender Links Recess	C	14.8	
	94.0	Type II Suspender Connector to Cable Bent	C	5.5	
	102.0	Credit for Cable Wrapping Wire Carbon Content	C	(3.61)	
	120.0	Lock Tight for Suspender Plug Screws Cable System Painting - Purchase DTM 3700	C	6.7	
	123.0	Enamel	C	30.0	
	127.0	Credit for Cable Sleeve Neoprene Gaskets	C	(2.5)	
<b>Subtotal</b>				<b>78.3</b>	
<b>Crockett Interchange 04-013054</b>		No Approved Change Orders for October 2003			
<b>Subtotal</b>				<b>0.0</b>	
<b>Maintenance Facility 04-013084</b>		Contract is complete			
<b>Subtotal</b>				<b>0.0</b>	
<b>Totals for Oct 2003</b>				<b>78.3</b>	

<sup>1</sup> Only approved CCOs for the month are listed in Appendix B.

<sup>2</sup> Funding Source(s)  
S = Supplemental work  
C = Construction contingency

**BAY AREA TOLL AUTHORITY**

**APPENDIX B - APPROVED CONTRACT CHANGE ORDERS (CCO)  
FOR OCTOBER 2003  
SAN MATEO-HAYWARD BRIDGE**

Bridge/ Contract	CCO Number <sup>1</sup>	CCO Description	Funding Source <sup>2</sup>	Impacts	
				Cost (\$1000's)	Schedule
<b>Widen Trestle 04-045014</b>		Contract is complete. (Settlement of outstanding claims is underway.)			
<b>Subtotal</b>					
<b>Mini-Toll Plaza 04-045024</b>		Contract is complete.			
<b>Subtotal</b>					
<b>Pedestrian Overcrossing 04-045044</b>		Contract is complete.			
<b>Subtotal</b>					
<b>Widen Roadway 04-045034</b>		Contract is complete.			
<b>Totals for Oct 2003</b>					

<sup>1</sup> Only approved CCOs for the month are listed in Appendix B.

<sup>2</sup> Funding Source(s)  
S = Supplemental work  
C = Construction contingency

**BAY AREA TOLL AUTHORITY**

**APPENDIX B - APPROVED CONTRACT CHANGE ORDERS (CCO)  
FOR OCTOBER 2003  
DUMBARTON BRIDGE**

Bridge/ Contract	CCO Number <sup>1</sup>	CCO Description	Funding Source <sup>2</sup>	Impacts	
				Cost (\$1000's)	Schedule
<b>Bayfront Widening 04-015114</b>	24-1	Cutting Additional Traffic Light Loops - Add'l Funds	C	20.0	
	31	Furnish and Install Camera and Pullbox	C	62.1	
	32	Modify Electrical System, Change Landscape @ Area 3	C	10.0	
	33	Enhancement of Safety Features	C	30.0	
	33-1	Enhancement of Safety Features - Add'l Funds	C	23.0	
	35	Cultivate to 150 mm	C	25.0	
<b>Totals for Oct 2003</b>				<b>170.1</b>	

<sup>1</sup> Only approved CCOs for the month are listed in Appendix B.

<sup>2</sup> Funding Source(s)  
S = Supplemental work  
C = Construction contingency



## BAY AREA TOLL AUTHORITY

## APPENDIX C - PROJECT COST SUMMARY DETAILS

The following sheets provide detailed cost information for each of the bridge projects. Capital Outlay Support (Engineering), Capital Right-of-Way and Capital Outlay are shown for each of the projects. The Project (BATA) Contingency, as well as the bridge projects totals, is shown at the end of each bridge summary.

**Definitions:**

1. Capital Outlay Support includes both Caltrans and Architectural/Engineering (A/E) consultant support.
2. Capital Right of Way includes acquisition, loss of goodwill, demolition, utilities relocations, relocation assistance, title costs, and sale of excess lands.
3. Capital Outlay includes construction bid terms, external third party agreements, state-furnished materials, supplemental construction work, and construction contingencies.

**Project Cost Summaries**  
(\$ Millions)

	EA Number	Baseline Budget Jun-00	Current Budget Oct-03	Current Forecast Oct-03	Net Change	Expended <sup>1</sup> to Date (7/98 - 9/03)	Note
<b>Northern Bridge Group</b>							
<i>Project 2003 - New Benicia-Martinez Bridge</i>							
<b>South Approach</b>							
Capital Outlay Support	00609x	3.5	3.7	3.7	0.0	3.6	
Capital Right of Way	006099	7.0	7.7	7.7	0.0	7.2	
Capital Outlay	006094	6.0	7.0	7.0	0.0	6.7	
<b>Total South Approach</b>		<b>16.5</b>	<b>18.4</b>	<b>18.4</b>	<b>0.0</b>	<b>17.5</b>	
<b>New Bridge</b>							
Capital Outlay Support	00603x	31.9	42.3	42.3	0.0	35.1	
Capital Right of Way	006039	4.1	9.0	9.0	0.0	0.8	
Capital Outlay	006034	247.3	307.5	307.5	0.0	158.2	
Non-BATA Funding		0.0	10.1	10.1	0.0	4.3	
<b>Total New Bridge</b>		<b>283.3</b>	<b>368.9</b>	<b>368.9</b>	<b>0.0</b>	<b>198.3</b>	
<b>Toll Plaza &amp; Administration Building</b>							
Capital Outlay Support	00604x	6.2	10.8	10.8	0.0	9.1	
Capital Right of Way	006049	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	006044	22.8	21.4	21.4	0.0	10.3	
<b>Total Toll Plaza &amp; Admin.</b>		<b>29.1</b>	<b>32.2</b>	<b>32.2</b>	<b>0.0</b>	<b>19.4</b>	
<b>I-680/Marina Vista Interchange</b>							
Capital Outlay Support	00605x	10.7	15.7	15.7	0.0	12.8	
Capital Right of Way	006059	7.4	2.0	2.0	0.0	1.9	
Capital Outlay	006054	43.2	45.1	45.1	0.0	19.3	
<b>Total I-680/MV I/C</b>		<b>61.4</b>	<b>62.8</b>	<b>62.8</b>	<b>0.0</b>	<b>34.0</b>	
<b>I-680/I-780 Interchange</b>							
Capital Outlay Support	00606x	18.7	25.1	25.1	0.0	18.1	
Capital Right of Way	006069	1.7	1.7	1.7	0.0	1.4	
Capital Outlay	006064	80.8	54.7	54.7	0.0	36.0	
Non-BATA Funding		0.0	20.9	20.9	0.0	1.5	
<b>Total I-680/I-780 I/C</b>		<b>101.2</b>	<b>102.4</b>	<b>102.4</b>	<b>0.0</b>	<b>57.0</b>	

<sup>1</sup> Unaudited

BAY AREA TOLL AUTHORITY

Appendix C - Project Cost Summary Details (cont'd)

	EA Number	Baseline Budget Jun-00	Current Budget Oct-03	Current Forecast Oct-03	Net Change	Expended to Date (7/98 - 9/03)	Note
<b>Project 2003 - New Benicia-Martinez Bridge (cont'd)</b>							
<b>Other Budgeted Capital</b>							(a)
Capital Outlay Support		7.1	7.5	7.5	0.0	3.3	
Capital Right of Way		0.9	0.5	0.5	0.0	0.0	
Capital Outlay		28.1	30.0	30.0	0.0	1.7	
<b>Total Other Budgeted Capital</b>		<b>36.1</b>	<b>37.9</b>	<b>37.9</b>	<b>0.0</b>	<b>5.0</b>	
Total Capital Outlay Support		78.2	105.0	105.0	0.0	82.0	
Total Capital Right of Way		21.1	20.9	20.9	0.0	11.4	
Total Capital Outlay		428.2	465.8	465.8	0.0	232.1	
Non-BATA Funding		0.0	31.0	31.0	0.0	5.8	
Project Contingency (BATA)		58.4	30.1	282.1	252.0		
<b>Total New Benicia-Martinez Bridge</b>		<b>586.0</b>	<b>652.8</b>	<b>904.8</b>	<b>252.0</b>	<b>331.3</b>	
<b>Project 3002 - Carquinez Bridge Replacement</b>							
<b>Replacement Bridge &amp; North Approach</b>							(b)
Capital Outlay Support	01301x	17.7	64.7	64.7	0.0	59.7	
Capital Right of Way	013019	3.0	3.0	3.0	0.0	3.3	
Capital Outlay	013014	213.7	239.2	239.2	0.0	217.4	
<b>Total Replacement Bridge &amp; N. Approach</b>		<b>234.4</b>	<b>306.9</b>	<b>306.9</b>	<b>0.0</b>	<b>280.4</b>	
<b>South Approach &amp; Interchange</b>							(c)
Capital Outlay Support	01305x	22.7	32.1	32.1	0.0	28.0	
Capital Right of Way	013059	5.0	5.0	5.0	0.0	4.6	
Capital Outlay	013054	116.0	73.9	73.9	0.0	56.2	
<b>Total South Approach &amp; I/C</b>		<b>143.7</b>	<b>110.9</b>	<b>110.9</b>	<b>0.0</b>	<b>88.8</b>	
<b>Maintenance Facility Phase I &amp; II</b>							(d)
Capital Outlay Support		0.7	4.7	4.7	0.0	4.4	
Capital Right of Way		1.6	1.6	1.6	0.0	1.4	
Capital Outlay		7.0	8.1	8.1	0.0	7.8	
<b>Total Maint. Facility Ph I &amp; II</b>		<b>9.3</b>	<b>14.5</b>	<b>14.5</b>	<b>0.0</b>	<b>13.6</b>	
<b>Demolition - 1927 Bridge</b>							
Capital Outlay Support	01309x	2.0	5.2	5.2	0.0	2.4	
Capital Right of Way	013099	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	013094	16.0	16.0	16.0	0.0	0.0	
<b>Total Demo - 1927 Bridge</b>		<b>18.0</b>	<b>21.2</b>	<b>21.2</b>	<b>0.0</b>	<b>2.4</b>	

Notes

- (a) Includes EA 00601\*, 00608\*, 0060A\*, 0060C\*, 0060F\*, 0060C\*, 0060H\*
- (b) Includes EA 00453\*, 01301\*, 01303\*, 01304\*
- (c) Includes EA 01302\*, 01305\*, 04700\*
- (d) Includes EA 00607\*, 01308\*

BAY AREA TOLL AUTHORITY

Appendix C - Project Cost Summary Details (cont'd)

	EA Number	Baseline Budget Jun-00	Current Budget Oct-03	Current Forecast Oct-03	Net Change	Expended to Date (7/98 - 9/03)	Note
<b>Project 3002 - Carquinez Bridge Replacement (cont'd)</b>							
<b>Other Budgeted Capital</b>							(e)
Capital Outlay Support		0.6	1.7	1.7	0.0	1.2	
Capital Right of Way		0.0	1.5	1.5	0.0	0.0	
Capital Outlay		10.6	11.5	11.5	0.0	6.3	
<b>Total Other Budgeted Capital</b>		<b>11.2</b>	<b>14.7</b>	<b>14.7</b>	<b>0.0</b>	<b>7.5</b>	
Total Capital Outlay Support		43.7	108.4	108.4	0.0	95.8	
Total Capital Right of Way		9.6	11.1	11.1	0.0	9.3	
Total Capital Outlay		363.3	348.7	348.7	0.0	287.7	
Project (BATA) Contingency		16.5	11.6	31.6	20.0		
<b>Total Carquinez Bridge</b>		<b>433.2</b>	<b>479.8</b>	<b>499.8</b>	<b>20.0</b>	<b>392.8</b>	
<b>Project 4003 - Richmond-San Rafael Bridge - West Trestle and Fender Rehabilitation</b>							
Capital Outlay Support	0438Ux	5.4	0.7	0.7	0.0	0.7	(f)
Capital Right of Way	0438U9	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	0438U4	33.9	0.0	0.0	0.0	0.0	
Non-BATA Funding		0.0	34.6	34.6	0.0	20.8	
Project (BATA) Contingency		6.1	0.0	0.0	0.0		
<b>Total R-SR Bridge - W. Trestle &amp; Fender Rehabilitation</b>		<b>45.4</b>	<b>35.4</b>	<b>35.4</b>	<b>0.0</b>	<b>21.6</b>	
<b>Project 4002 - Richmond-San Rafael Bridge - Deck Rehabilitation</b>							
Capital Outlay Support	04152x	9.0	5.0	5.0	0.0	0.3	
Capital Right of Way	041529	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	041524	33.0	33.0	33.0	0.0	0.0	
Non-BATA Funding		0.0	4.0	4.0	0.0	0.0	
Project (BATA) Contingency		11.4	11.4	11.4	0.0		
<b>Total R-SR Bridge - Deck Rehab</b>		<b>53.4</b>	<b>53.4</b>	<b>53.4</b>	<b>0.0</b>	<b>0.3</b>	
<b>Richmond Parkway (Non-Caltrans)</b>							
Capital Outlay Support	non-Caltrans	0.0	0.0	0.0	0.0	0.0	
Capital Right of Way	non-Caltrans	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	non-Caltrans	5.9	5.9	5.9	0.0	2.4	(g)
<b>Total Richmond Parkway</b>		<b>5.9</b>	<b>5.9</b>	<b>5.9</b>	<b>0.0</b>	<b>2.4</b>	
<b>Total Northern Bridge Group</b>		<b>1123.9</b>	<b>1227.2</b>	<b>1499.2</b>	<b>272.0</b>	<b>748.4</b>	

Notes

(e) Includes EA 01306\*, 01307\*, 0130A\*, 0130C\*, 0130D\*, 0130F\*, 0130G\*, 0130H\*, 0130J\*, 0130X\*

(f) Includes EA 04382\*, 04383\*, 0438U\*

(g) Total reimbursements made to the City of Richmond for current allocation.

BAY AREA TOLL AUTHORITY

Appendix C - Project Cost Summary Details (cont'd)

	EA Number	Baseline Budget Jun-00	Current Budget Oct-03	Current Forecast Oct-03	Net Change	Expended to Date (7/98 - 9/03)	Note
<b>Southern Bridge Group</b>							
<b>Project 6004 - San Mateo-Hayward Bridge Widening</b>							
<b>Widen Trestle</b>							
Capital Outlay Support	04501x	7.9	22.8	22.8	0.0	20.3	(h)
Capital Right of Way	045019	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	045014	124.8	128.9	128.9	0.0	126.4	
<b>Total Widen Trestle</b>		<b>132.7</b>	<b>151.7</b>	<b>151.7</b>	<b>0.0</b>	<b>146.8</b>	
<b>Widen Roadway</b>							
Capital Outlay Support	04503x	4.3	6.0	6.0	0.0	6.0	
Capital Right of Way	045039	1.0	0.0	0.0	0.0	0.0	
Capital Outlay	045034	29.2	26.1	26.1	0.0	25.5	
<b>Total Widen Roadway</b>		<b>34.5</b>	<b>32.1</b>	<b>32.1</b>	<b>0.0</b>	<b>31.4</b>	
<b>Construct Mini Toll Plaza</b>							
Capital Outlay Support	04502x	1.7	3.8	3.8	0.0	2.4	
Capital Right of Way	045029	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	045024	4.4	6.3	6.3	0.0	6.0	
<b>Total Mini Toll Plaza</b>		<b>6.1</b>	<b>10.1</b>	<b>10.1</b>	<b>0.0</b>	<b>8.4</b>	
<b>Other Budgeted Capital</b>							
Capital Outlay Support		1.6	7.5	7.5	0.0	3.9	(i)
Capital Right of Way		0.5	1.5	1.5	0.0	0.5	
Capital Outlay		8.9	8.6	8.6	0.0	3.3	
<b>Total Other Budgeted Capital</b>		<b>11.0</b>	<b>17.6</b>	<b>17.6</b>	<b>0.0</b>	<b>7.7</b>	
Total Capital Outlay Support		15.5	40.1	40.1	0.0	32.6	
Total Capital Right of Way		1.5	1.5	1.5	0.0	0.5	
Total Capital Outlay		167.3	169.9	169.9	0.0	161.2	
Project (BATA) Contingency		19.3	6.0	6.0	0.0		
<b>Total San Mateo-Hayward Bridge Widening</b>		<b>203.6</b>	<b>217.5</b>	<b>217.5</b>	<b>0.0</b>	<b>194.3</b>	
<b>San Mateo-Hayward Bridge - West Approach Replacement Planting</b>							
Capital Outlay Support	04860x	0.1	0.1	0.1	0.0	0.0	
Capital Right of Way	048609	0.0	0.0	0.0	0.0	0.0	
Capital Outlay	048604	0.2	0.2	0.2	0.0	0.0	
Project (BATA) Contingency		0.1	0.1	0.1	0.0		
<b>Total SM-H Bridge W. Approach Replacement Planting</b>		<b>0.4</b>	<b>0.4</b>	<b>0.4</b>	<b>0.0</b>	<b>0.0</b>	

Notes:

(h) Includes EA 04501\*

(i) Includes EA 00305\*, 04504\*, 04505\*, 04506\*, 04507\*, 04508\*, 04509\*

BAY AREA TOLL AUTHORITY

Appendix C - Project Cost Summary Details (cont'd)

	EA Number	Baseline Budget Jun-00	Current Budget Oct-03	Current Forecast Oct-03	Net Change	Expended to Date (7/98 - 9/03)	Note
<b>I-880/SR-92 Interchange Improvement</b>							(j)
Capital Outlay Support	23317x	20.8	24.1	24.1	0.0	14.6	
Capital Right of Way	233179	8.0	9.9	9.9	0.0	0.0	
Capital Outlay	233174	70.3	85.2	85.2	0.0	0.0	
Non-BATA Funding		0.0	9.6	9.6	0.0		
Project (BATA) Contingency		25.1	5.1	20.6	15.5		
<b>Total I-880/SR-92 I/C Improve.</b>		<b>124.2</b>	<b>133.8</b>	<b>149.3</b>	<b>15.5</b>	<b>14.9</b>	
<b>Dumbarton Bridge West Approach Projects</b>							
<b>US101/University Avenue Interchange Reconstruction (non-Caltrans)</b>							
Capital Outlay Support		0.0	0.0	0.0	0.0	0.0	
Capital Right of Way		0.0	0.0	0.0	0.0	0.0	
Capital Outlay		3.8	3.8	3.8	0.0	3.7	(k)
<b>Total US-101/University Ave.</b>		<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>0.0</b>	<b>3.7</b>	
<b>Bayfront Expressway (SR-84) Widening</b>							(l)
Capital Outlay Support	00487x	4.4	8.7	8.7	0.0	7.3	
Capital Right of Way	004879	1.3	0.2	0.2	0.0	0.2	
Capital Outlay	004874	24.8	26.6	26.6	0.0	23.9	
Project (BATA) Contingency		3.3	0.5	0.5	0.0		
<b>Total Bayfront Expressway (SR-84)</b>		<b>33.8</b>	<b>36.0</b>	<b>36.0</b>	<b>0.0</b>	<b>31.3</b>	
<b>Total Southern Bridge Group</b>		<b>365.7</b>	<b>391.4</b>	<b>406.9</b>	<b>15.5</b>	<b>244.3</b>	

**Notes:**

(j) Includes EA 01601\* and 01602\*

(k) Total reimbursements made to the City of East Palo Alto for current allocation.

(l) Includes EA 01511\* and 01512\*

**General Notes:**

1. Capital outlay support includes both Caltrans and Architectural/Engineering (A/E) consultant support.
2. Capital right of way includes acquisition, loss of goodwill, demolition, utilities relocations, relocation assistance, title costs, and sale of excess lands.
3. Capital outlay includes construction bid items, supplemental construction work, state furnished materials, construction contingencies, and external third party agreements.







*Rotator at Pier 16*



*New Bridge Deck at south end*



*Marina Vista Overpass*



*I-780/I-680 Connector Overpass looking east*



*Pier 5 in foreground*



*Pier 5 Isolation Casing*



## CARQUINEZ BRIDGE PHOTOS



*Bridge Paving*



*Sign Installation*



*Bike/Pedestrian Path Railing Installation*



*Light Standard Installation*



*South Approach and Interchange looking north*



*South Approach Interchange @ Pomona*